

No. 4

An

Inaugural Dissertation
on
"Cholera Infantum"
For the Degree of M. D.
Submitted to the Examination
of the Medical Faculty
of the
University of Pennsylvania
by Frederick Stein
Per ~~Frederick Stein~~.

of Lancaster, Penn^a

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the first time I have seen it
and I am very glad to see
it in such a state of preservation
and I hope it will be
well preserved for many years to come

The diseases of children form one of the most important class of maladies. - They are not only numerous, but generally altogether distinct in their nature and appearance from those diseases which affect persons of matured age. - They are moreover unquestionably more perplexing to the practitioner than the disease of adulty. - I have selected one of the complaints incident to infancy, for the subject of my Inaugural Dissertation. - The "Cholera Infantum" a disease which is rapid in its progress, and of extreme fatal tendency! - As it cannot be presumed that a person of my age - one who is just entering upon the anxious duties of the medical Profession, has much, or indeed any thing new to communicate of a practical nature. It will I hope not be expected that I should give much more than what I find in books on this subject & what I have learned from the valuable Lectures of Professor Chapman. -

"Cholera Infantum":

The disease which has received the name of "Cholera Infantum" is characterised by the following symptoms - copious discharges both upwards and downwards, with pain, gripings, and spasms - The late "Dr Rush" has given us so full and perfect a description of this disease that it were useless to attempt one myself - I shall therefore give the Doctor's account of the appearances of this disease in his own words -

"It affects children from the first or second week after their birth, till they are two years old - It sometimes begins with a Diarrhoea which continues for several days without any other symptom of disposition - but it more frequently comes on with a violent vomiting and purging and a high fever - The matter discharged,

the same allusioning to the other several
parts of the complement of the verb, which
are now omitted. The first part consists
of the adverbial elements, the second of the
main verb, and the third of the predicate, which
is composed of the subject and object, and
is now omitted. The first part of the verb
consists of the verb itself, and the second
of the object, which is now omitted. The
third part of the verb consists of the verb
itself, and the object, which is now omitted. The
fourth part of the verb consists of the verb
itself, and the object, which is now omitted. The
fifth part of the verb consists of the verb
itself, and the object, which is now omitted. The
sixth part of the verb consists of the verb
itself, and the object, which is now omitted.

from the stomach is generally yellow or green,⁶
but the stools are sometimes slimy and bloody,
without any tincture of bile - In some instances
they are nearly as limpid as water -

Worms are frequently discharged in each kind
of the stools that have been described - The
children in this stage of the disease appear
to suffer a good deal of pain - They draw
up their feet, and are never easy in one
posture - The pulse is quick and weak,
the head is unusually warm, while the
extremities retain their natural heat, or
incline to be cold - The fever is of the
remitting kind, and discovers violent
exacerbations especially in the evening -

The disease affects the head so much,
as in some instances to produce symp-
-toms not only of delirium, but of mania
insomuch that the children throw their
heads backwards and forwards, and
sometimes make attempts to scratch,

young or rather a yearling is apparently all one
would have probably to distinguish from them, and if
the general rule would be consistent with your knowledge
of the species, an old bird is probably less likely to
survive than an old female although you could
still expect many young birds to live out
a full year. I will go back to the first
and second sections and your kindly furnish
the conclusions that you have arrived at in writing
the first section on propagation. I do not all
at present understand what you mean by
"old" and "young" but I am however, I think
able to understand the first section quite well
and I hope you will be able to furnish me
with some additional details concerning
the second section. I am sorry to say that
I have not been able to get any information
concerning the last section, and I hope you will
be able to furnish me with some information
concerning it.

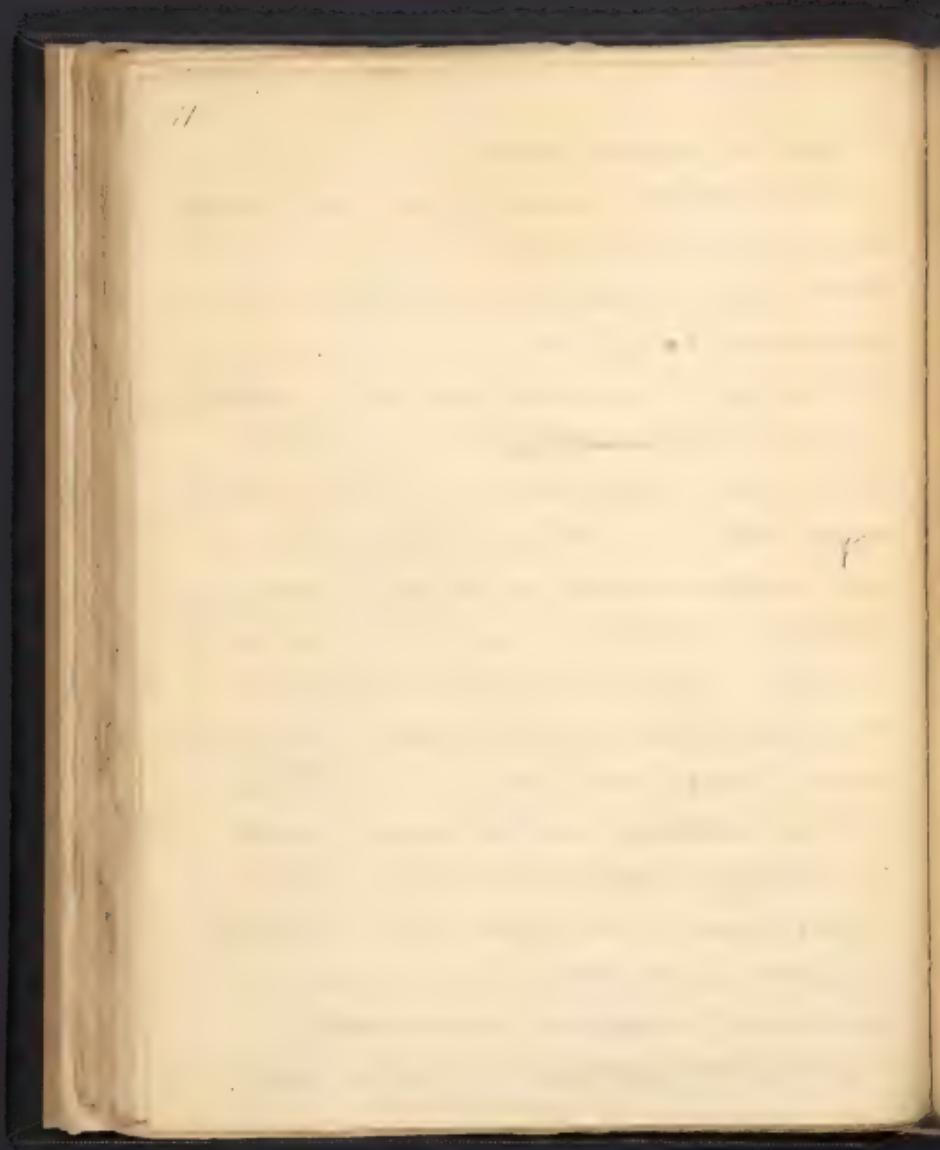
and to bite their parents - nurses, and even themselves - A swelling frequently occurs in the abdomen, and in the face and limbs - An intense thirst attends every stage of the disease -

The eyes appear languid and hollow, and the children generally sleep with them half closed - Such is the insensibility of the system in some instances of this disease, that flies have been seen to alight upon the eyes when open without exciting a motion in the eyelids to remove them - Sometimes the vomiting continues without the purging, but more generally ^{the purging} continues without the vomiting throughout the whole course of the disease - The stools are extremely foated, but in some instances they are without smell, and resemble drinky, and alimenta which have been taken into the body - The disease is sometimes fatal in a few days - I once saw it carry off

the first day of October, previously wrote, and the second
in which we obtained possession of our house. It was a small
one-story house, built of adobe, with a tiled roof, and
was surrounded by a fence of rough stones. The house
was divided into two rooms, one being a kitchen,
and the other a bedroom, with a large window, which
provided sufficient light for the house, and could
easily be opened from the inside. The house had
a tiled roof, and the walls were made of adobe.
The floor was made of wood, and the ceiling
was made of beams. The house was very simple,
but comfortable, and provided all the necessities
of life. We were very happy in our new home, and
spent many happy hours there.

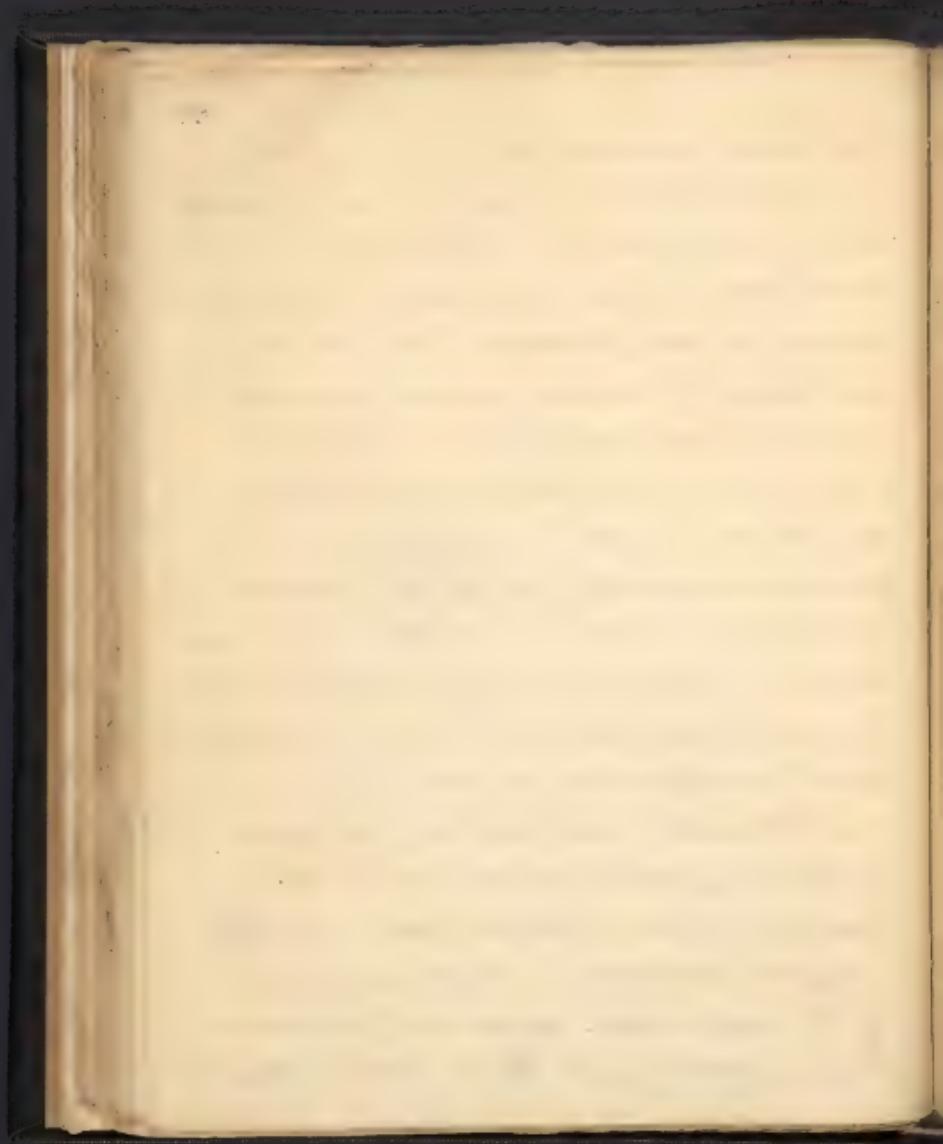
a child in lucency four hours - its duration
is varied by the season of the year, and by
the changes in the temperature of the atmosphere.
A cool day frequently abates its violence, and
disposes it to a favourable termination -
it often continuing with occasional variations -
for six weeks or two months -

Where the disease has been of long continu-
ance, the approach of death is gradual,
and attended by a number of distressing
symptoms - An evaporation of the body,
to such a degree, as that the bones come
through the skin, livid spots, a singultus,
convulsions, a strongly marked Hippo-
catic countenance; and a sene mouth,
generally precede the fatal termination
of this disease - Few children ever recover
after the last symptoms which have been
mentioned make their appearance -
The cholera infantum generally makes its



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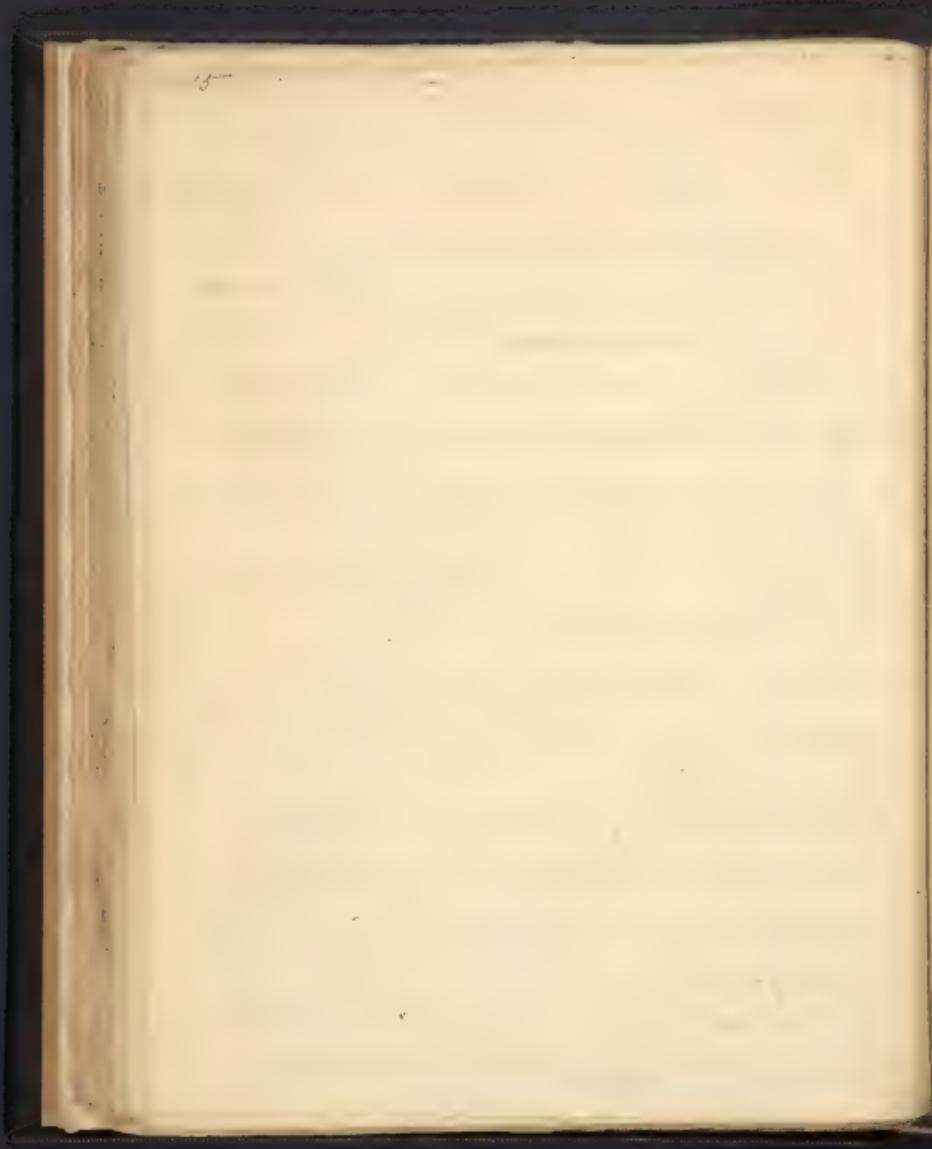
appearance in the summer months, commencing
in July and continuing until the cold weather
sets in - It appears to be a disease peculiar to the
United States, inasmuch as we do not find it
described in any European work - In cities
and towns it is much more prevalent than
in the country, and hence we trace its
connection with those impure states of
atmosphere which are always present in
the warm months in ^{populated} ~~populæ~~ cities - ✓
The opinion which is entertained by some
that it arises from inequalities in diet
and especially from the use of unripe
fruit would seem erroneous, when
we take into consideration, the fact
of its less frequent appearance in the
country, where children have ready
access to all kinds of unripe fruit, and
of its appearance only at a particular
season of the year - For it certainly cannot



be supposed that irregularities in diet are
only committed during those months of the
year in which this disease generally prevails -
There must be something in the state of the atmos-
phere, in the summer months, which predis-
poses to gastric affections - It is not a mere
local disease of the prima vice - the system
& take it, is generally affected throughout -
the disease falling upon those parts which have
acquired a predisposition, either from some
hidden cause floating in the atmosphere or from
irregularities in diet

The choura although primary a gastric
affection is soon affected sympathetically to
the Hepatic system -

The Predisposing causes are - a heated
and impure atmosphere - and the Exciting
causes are - whatever deranges the prima vice
as irregularities in diet and clothing - expe-
sure to cold when the body is previously
heated - It is aggravated when it occurs



Buring dentition -

Of the Treatment.

The Indication is 1^o To evacuate the alimentary canal and 2^o to allay pain, aid involution and determine to the surface -

As it always commences with a derangement of the alimentary canal, our first views should be directed towards it -

As regards Emetics they can often be dispensed with, as nature very often rids the stomach of its contents without the aid of artificial means - But in some violent cases, it becomes necessary to use them, and in this case Ileacuanava is generally preferred - In the country it is not often necessary to recur to Emetics -

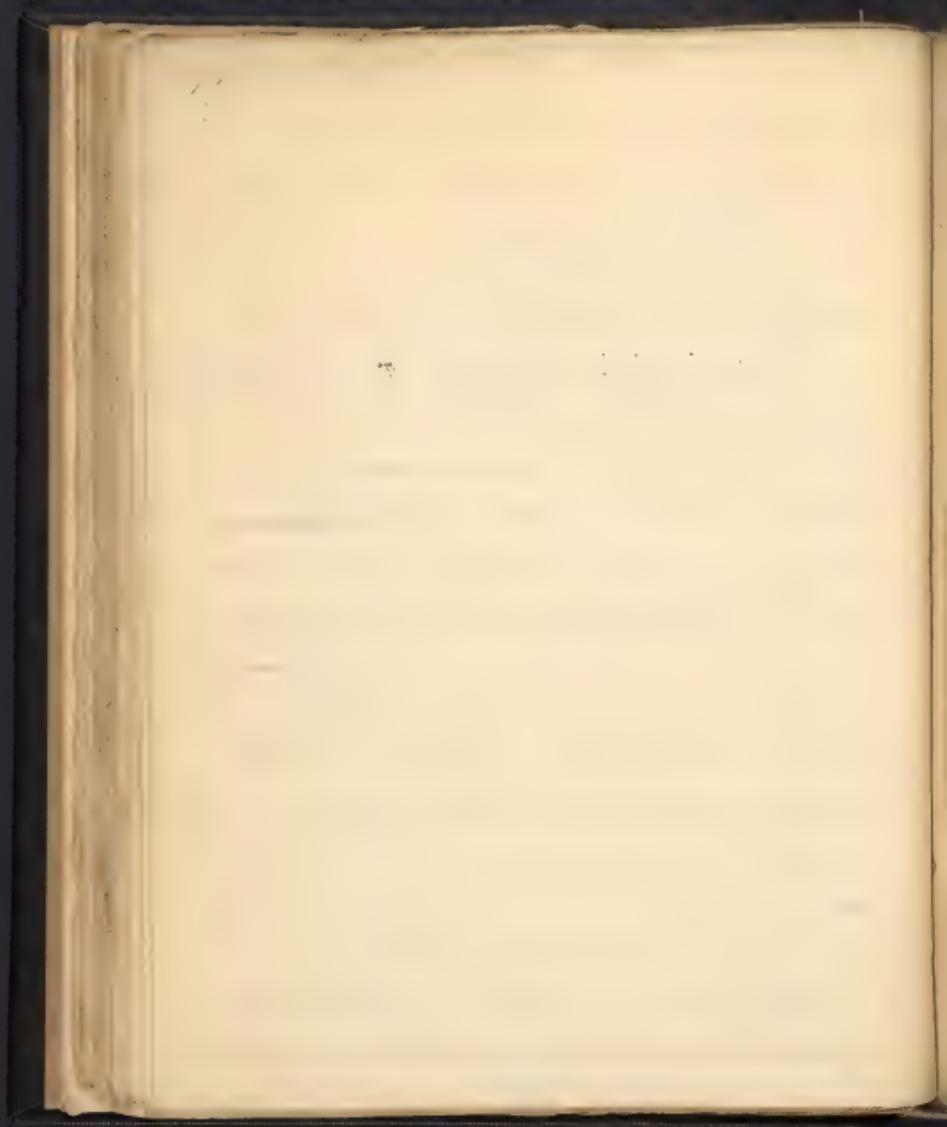
Bangalow - can never be dispensed with but there is some difference as to the choice of them - The Stomach being often

but their blow is mix'd with the force, as
happens occasio ally the laston perhaps must
be preceable -

ie it being retained when all others were
scattered -

extremely irritative, there should be several sponges
one next other live - (about often answers) often -
as well from its being irripid - and can begin
in a small number - which it often - small consequence -
bastard bil - is often substituted for the Lancet -
and it is more apt to be rejected - and is not
sufficiently active - (a)

G F Chapman - has often used ~~the~~ with advantage -
a solution of Epsom Salts (e) he thinks has a
tendency to allay the irritation of the Stomach
that where the irritation is so violent that no
medicine can be retained or should promptly
conserve the allay irritation by anodyne injec-
tions - or a supposition of Opium - and the
neutralizing applications - But if the vomiting
is violent with pain of the abdomen - not skin
and muscle throbs - in number can be superior
to the Lancet - G F Chapman's opinion is -
that many lives are lost from the timorous
use of the Lancet - And is he not warranted in



expelling them? there were suppurative effusions
to no less of previous inflammation & so the dis-
ease appears in the country it often requires
the insect it appears in a more violent form
and is seldom fatal -

If we find that after P. S. ~~or~~ the Stomach
will be found to retain Medicine, a small
dose may again be injected, if it be injected a small
quantity of Opium may be added -

The irritation being allayed we should next
resort to those remedies which restrain
the reacting action of the surface -

There is generally an unequal temperature
some parts being cold to the touch others
warm, and the child appears to be in a
nervous sensible state - the Thermometer
now produces an equal temperature and
we must be sure the patient - For this purpose
Flannel should be worn next the skin -

The disease after some time, is apt to run

It is no doubt occasioned by the impure state of
the atmosphere, the bands being in a weak state
and the prismatic cause still acting is sufficient
to produce such bands.—

Such as alumina - Gally - Nitro - &c.

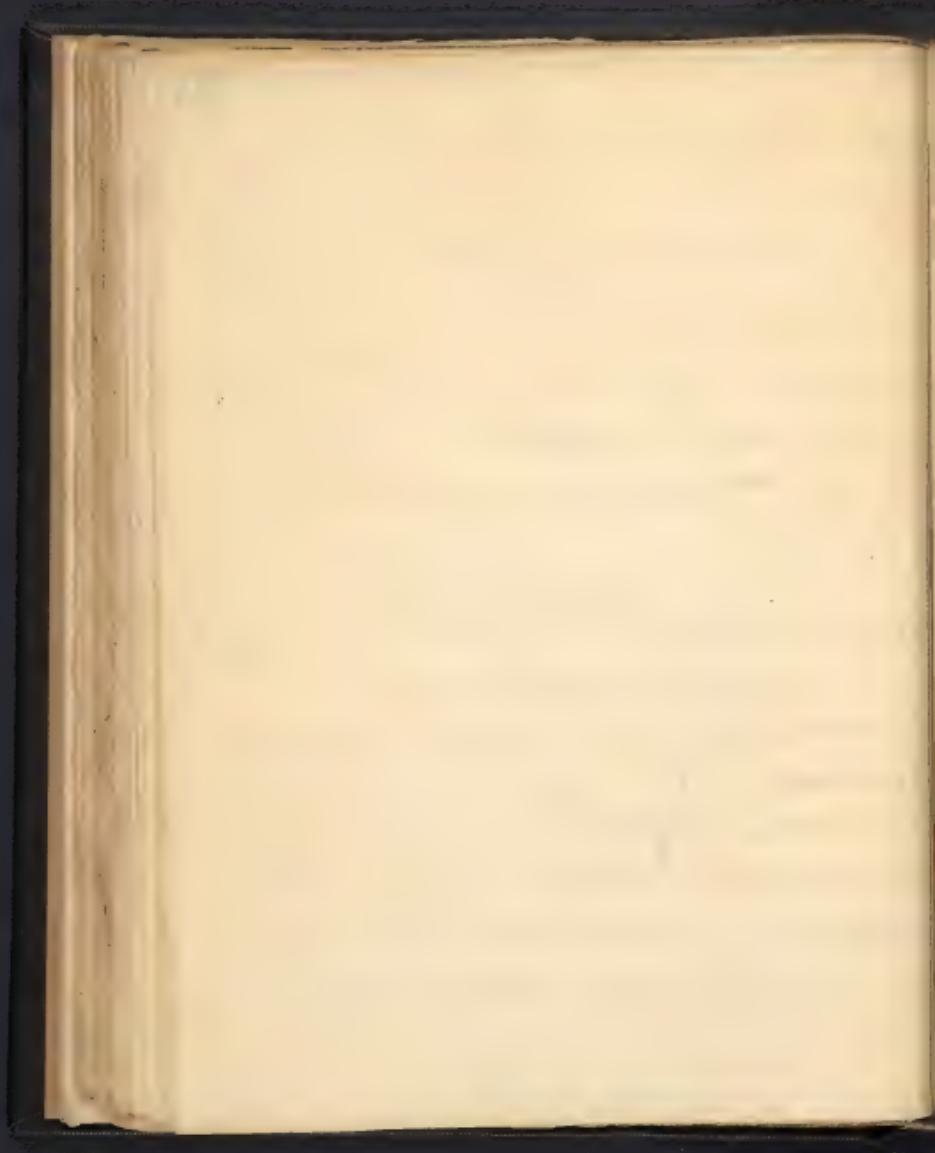
into Diarrhoea, attended with tenesmus, tho' this is not a very common consequence in the convalescent. The remedies have commonly consist'd of Astringents, &c and to relieve the gripings, injections of melted butter, pea-powder & salt and sauerkraut are useful - or what is better anodyne injections - For suppressing Diarrhoea the entaceous pulse, and a variety of Tonics are in use - Where much astringency is necessary Dr Chapman has uniformly preferred a strong infusion of the New-Berry root -

Dr Physick in such cases uses an infusion of Hematoxylo -

What I have principally seen used is the Hypericum poultice - It is a very powerful rubbing up - It is made into a poultice by interring a few handfuls of the Flowers, and impining them in one quart of diluted alcohol - expose to the sun for six or eight days - a compound poultice is given at

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a base - and repeated every two or three hours
according to circumstances. This is the sole vice of
vice in making diarrhoea. The more circumstantial
is also more useful writing of disease - as a record
for other practitioners. When the disease occurs in
either the necessity to be suspended or, and for which
no other can be substituted, is a removal to the
country. It is certain that the impure air,
is a powerful obstacle to the removal and a power-
ful auxiliary in aggravating this disease.
It is striking from the fact, that when it appears
in the campagna it is easily removed.
It is at this stage of the disease, that a blanket
should not be neglected. This remedy was
first introduced by Dr Chapman. It should be
applied round the abdomen, and of a moderate
tightness - it imparts tone to the alimentary
canal and keeps up an equilibrium of tempera-
ture. -



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Prophylactic Treatment.

After the disease is removed, we should guard against a relapse - ^{1st} By a proper diet - The child should subsist principally on farinaceous articles, and where Milk enters as a principal ingredient - I have known an infant to subsist exclusively upon Milk and Barley water two weeks, having been previously much debilitated from refusing the mother's breast, and from diarrhoeal mixed with blood - ^{2d} Excess in eating and drinking should be carefully avoided. -

^{3d} Flannel should be worn next the skin. - ^{4th} Cleanliness should be observed, as it tends much to the comfort of the patient. -

and the following day I went to Grafton
County Park and saw a Red-tail Hawk
nesting on a tall spruce tree. The bird
was very tame and would stand near
the nest for a long time. It was
nesting in a spruce tree which had
been cut down and was growing on a
bank of rocks. The nest was made of sticks
and was lined with green moss. The
hawk was seen to fly over the spruce
tree and the nest was visible.
The hawk was seen to fly over the spruce
tree and the nest was visible.

Thus Gentlemen I have given a short account of the Symptoms - Character - and Cure of "Cholera infantum". That it is an imperfect one I am very sensible of - Hoping however that it may be deemed sufficient for the task imposed on me in receiving the honors of the University, I respectfully submit it, "with all its imperfections on its head," to the ordeal that awaits it.

